

**Notice of Allowability**

Application No.

10/017,249

Examiner

PHUOC H DOAN

Applicant(s)

CHANG ET AL.

Art Unit

2687

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/20/04.
2. ☒ The allowed claim(s) is/are 1-20.
3. ☒ The drawings filed on 14 December 2001 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date 12/28/04
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_.
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_.

## DETAILED ACTION

### *Allowable Subject Matter*

1. Claims **1-10** are allowed.
2. The following is an examiner's statement of reasons for allowance:

Claims 1-20 are allowed as stated in the applicant's amendment in pages 2-6 on the dated of 12/20/04.

The prior art of record do not disclose or suggest, a mobile communication system comprising: a stratospheric platform having stratospheric platform operations, including creating a plurality of beams within a coverage area, a first beam being directed to at least one user terminal at a first microcell and a plurality of additional beams illuminating microcells immediately adjacent said first microcell; a gateway station transmitting a first ranging signal and a third ranging signal to said at least one user terminal via a first platform, having a first known location and transmitting a second ranging signal and a fourth ranging signal to said at least one user terminal via a second platform having a second known location; said at least one user terminal retransmitting said first ranging signal and said third ranging signal back to said gateway station via said first platform and retransmitting said second ranging signal and said fourth ranging signal back to said gateway station via a third platform, having a third known location; and a processing center in communication with said gateway station determining a first, a second, a third, and a fourth delay corresponding to time differences between transmission and receipt of said first ranging signal, said second ranging signal, said third ranging signal, and said fourth ranging signal respectively; said processing center

determining a first position of said user terminal in response to said first known location, said second known location, and said third known location as well as said first delay and said second delay; said processing center determining a second position, different from said first position, in response to said first known location, said second known location, and said third known location as well as said third delay and said fourth delay, thereby determining movement of said at least one user terminal; said processing center signaling said stratospheric platform via said gateway station to redirect said first beam from said first microcell to a second microcell, in response to said movement, as substantially described in independent claims **5, 13, and 16**. These limitations, in combination with other remaining limitations of claims **5, 13, and 16** are not taught nor suggested by the prior art of record.

3. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to PHUOC H DOAN whose telephone number is 571-272-7920. The examiner can normally be reached on 9:30 AM - 6:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, LESTER G KINCAID can be reached on 571-272-7922. The fax phone

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number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuoc Doan  
04/14/05



**SONNY TRINH**  
**PRIMARY EXAMINER**